

ABSTRACT

This invention relates to the surface modified silica by plasma polymerization coating, plasma polymerization method and plasma polymerization devices. Silica, active ingredients of EMC, is coated by plasma polymerization coating in order to enhance the adhesion of silica to epoxy resin and thus to improve the reliability of EMC. The monomers for the plasma polymerization coating were 1,3-diaminopropane, allylamine, pyrrole, 1,2-epoxy-5-hexene, allylmercaptan and allylalcohol, and the surface modified silica was utilized to prepare EMC for electronic devices. The plasma polymerization coating, which is known to be environment-friendly method, provided excellent flexural properties of EMC compared to the conventionally prepared EMC.